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ABOUT THIS REPORT

The following is a demographic profile of the Western Sands SCORP Region completed by the Applied Population Laboratory, University of Wisconsin- Madison. This profile was created to inform the 2005-2010 SCORP planning process by providing demographic background information for understanding the context within which outdoor recreation occurs. Similar demographic profiles are provided for each of the eight SCORP Regions, and one summary profile for the state of Wisconsin compares Region to Region.

The profile includes current, past and projected information on population demographics and housing within the Western Sands Region. Data are displayed in maps, tables, and charts and summarized briefly in text. We begin by painting a demographic picture of the current conditions in the Region using data from Census 2000 and from the Wisconsin Department of Administration's Population Estimates (2004). Next, we address historical trends that have shaped the Western Sands Region over the past several decades. We include information on how the population has been changing over time, where housing development has been rapidly occurring, and the impact that natural amenities may have on these changes. Finally, we use population projections from the Wisconsin Dept. of Administration to discuss how the population of the Western Sands Region might change over the next several years.

It is important for planners to consider demographic information when planning for outdoor recreation because characteristics of the population impact demand for different types of outdoor recreation. For instance, areas with growing populations may experience increasing demand for recreational resources, and areas with aging populations may demand different types of resources than those with young populations. Similarly, income, education, race, and sex have all been shown to affect preferences for outdoor recreation.

Starting in 1999, the Wisconsin DNR initiated a three-year study to identify, with considerable input from the public and non-profit groups, places in the state that will be critical in meeting Wisconsin's long-term conservation and recreation needs. The resulting 229 "Legacy Places" collectively are the special places that "make Wisconsin Wisconsin." The WDNR only represents the Legacy Places as points because specifically identifying which lands and waters associated with each place are most appropriate to maintain and protect is most appropriately left to a locally-focused planning process. The Legacy Places are represented on many of the maps that you will see in this report. The points noted with a star in the center are Legacy Places that the WDNR has determined to have particularly high recreation potential. The Land Legacy information helps to bring cultural and environmental meaning to the demographic data that we present.

The principal author of this report is Richelle Winkler (rwinkler@ssc.wisc.edu) of the Applied Population Laboratory, with direction provided by Jeff Prey (Jeff.Prey@dnr.state.wi.us) of the Wisconsin Department of Natural Resources. With appreciation and thanks, the author would like to acknowledge the insight and assistance provided by Chris Whelpley, David Long, Bill Buckingham, Dan Veroff, Nick Fisher, and Don Field. Each lent their skills and talents in preparing data, constructing tables and charts, formatting, and editing text. For more information about this report, the authors can be contacted via email.





EXECUTIVE SUMMARY

The Western Sands Region is located in the west-central part of the state and encompasses Adams, Chippewa, Clark, Eau Claire, Jackson, Juneau, Marathon, Monroe, Portage, and Wood Counties. Urban centers in the Region include: Wausau in Marathon County, Eau Claire in Eau Claire County, Marshfield in Wood and Marathon Counties, Wisconsin Rapids in Wood County, and Stevens Point in Portage County. Otherwise, the Region is largely rural. Important waterways in the Region include the Wisconsin, Chippewa, and Black Rivers.

- In 2004, the Western Sands Region had an estimated population of 573,665 residents. Approximately 65% of residents live in Marathon, Eau Claire, Wood, or Portage County.
- About half of the people in the Western Sands Region (52%) live in urban areas. The majority of recent population growth and housing development has been occurring at the outskirts of the Region's cities and in rural towns near lakes and rivers.
- 95% of the population is non-Hispanic and White. Asians make up the largest minority group in the Region at about 2% of the total population.
- Rivers, lakes and forests attract seasonal residents, tourists, and in-migrating retirees to particular areas of Western Sands Region. While only about 5% of all housing units in the Region are for seasonal use, seasonal housing is prominent in Adams (40%) and Juneau (17%) Counties. Similarly, tourism-related employment is highest in Adams, Juneau, and Jackson Counties.
- While some areas of the Western Sands Region attract in-migrating retirees and experience out-migrating young adults (Adams and Juneau Counties), other areas of the Region attract in-migrating young people (Portage and Eau Claire Counties). The balance of migration trends in the Region produces an age structure for the Region as a whole that is similar to the state of Wisconsin's with a median age of 36 years. The oldest county in the Region is Adams, with a median age of 45 years. Eau Claire and Portage Counties are each home to University of Wisconsin satellite campuses that attract college-aged students and have young median ages (32 and 33 years respectively).
- In comparison with the rest of the state, people in the Western Sands are less educated, have lower income, and have relatively low housing values. Median household incomes and housing values are highest in Marathon and Portage Counties and lowest in Clark County.
- Population in this Region has been growing at a relatively slow and steady pace over the last several decades, a rate of just under 1% each year. Since 1990, Juneau, Jackson, Monroe, and in particular Adams Counties have experienced the fastest growth rates in the Region.
- Housing development has been occurring at a faster rate than population growth since at least 1950. Adams County has consistently experienced the most rapid rates of housing development, while Marathon and Eau Claire Counties have added the largest numbers of new housing units over time
- According to Johnson and Beale's recreational county classifications, Adams and Juneau Counties have many recreation-based resources and high demand for recreation. Because of theses resources, these counties might be expected to experience population growth and housing development at a fast pace.
- Population is projected to continue to increase in the Western Sands Region over the next several years, particularly in Juneau, Eau Claire, Monroe, and Portage Counties. Juneau County is expected to add 3,979 residents between 2004 and 2020, for an increase of 16%.





POPULATION DISTRIBUTION

According to the Wisconsin Department of Administration population estimates (WDOA 2004), 573,665 people live in the Western Sands Region. This amounts to about 62 persons per square mile.

Figure 1 shows population distribution for the Western Sands Region by county. Most of the people in the Region live in Marathon, Eau Claire, Wood, or Portage County. Together, these counties account for about 65% of the population in the Western Sands Region. Marathon County is home to the Wausau metropolitan area, and the Eau Claire metropolitan area is located in Eau Claire County. Urban centers in Wood and Portage Counties include: Marshfield, Wisconsin Rapids, and Stevens Point.

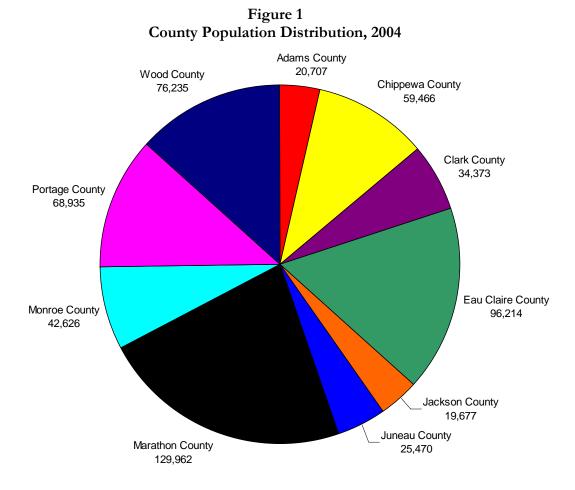


Figure 2 shows population density by municipality (cities, villages, and towns). This view allows us to see variation within counties. The majority of the landscape in the Western Sands Region is made up of lower population density towns, scattered with cities and villages that have higher population densities.



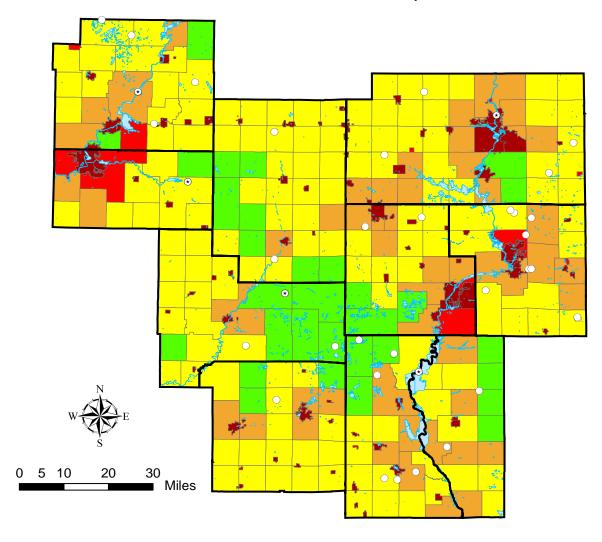


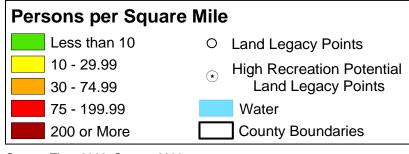


Figure 2

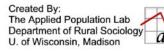
Population Density, 2004

Calculated at Block Group Level





Source: Tiger 2000, Census 2000









URBAN/RURAL

About half of the people in the Western Sands Region (52%) live in urban areas, according to 2000 Census definitions. This includes people who live in densely settled territory with a population of 2,500 or more.

Table 1 shows the proportion of people living in urban places by county for the Western Sands Region. The majority of residents in Eau Claire, Wood, Portage, and Marathon Counties live in urban places. Clark, Adams, and Juneau Counties are almost entirely rural.

Table 1
Urbanization in the Western Sands Region, 2000

	Total Population	Urban Population	Percent Urban
Adams County	19,920	0	0.0%
Chippewa County	55,195	25,968	47.0%
Clark County	33,557	2,450	7.3%
Eau Claire County	93,142	71,826	77.1%
Jackson County	19,100	5,602	29.3%
Juneau County	24,316	3,635	14.9%
Marathon County	125,834	69,334	55.1%
Monroe County	40,899	17,033	41.6%
Portage County	67,182	41,486	61.8%
Wood County	75,555	47,864	63.3%
Western Sands Region	554,700	285,198	51.4%

Source: Census 2000, Summary File 1

Note: Population in Adams and Marquette Counties have been corrected from a Census misallocation.

Corrected according to WDOA.







HOUSING DISTRIBUTION

Housing development impacts both the supply and the demand for outdoor recreation. Housing affects the *supply* of outdoor recreation resources by taking up land that may previously have been considered to be recreational or have potential for recreation activities. Outdoor recreation (especially those activities that require a substantial amount of open space, like backpacking, ATV riding, or hunting) is largely considered incompatible with higher density housing development.

Housing development also impacts *demand* for outdoor recreation. At the most basic level, housing development in an area generally means more people in that area who are likely to participate in some form of recreation activity nearby. In this way, housing unit counts inform outdoor recreation planners similarly to population counts.

Examining housing is especially useful to recreation planners because population counts do not include seasonal residents. Seasonal residents are an important component of demand for outdoor recreation in Wisconsin, and looking at housing development (including both permanent and seasonal homes) can offer a more complete view of where demand for outdoor recreation occurs than looking at population distribution alone.

Figure 3 shows the 2000 distribution of housing density in the Western Sands Region by Census Block Group. The map looks similar to the population map presented above, except that the influence of seasonal housing stands out in Juneau and Adams Counties. The housing map shows almost as much development in these counties as it does in Marathon and Chippewa Counties, where the full-time resident population is much higher.

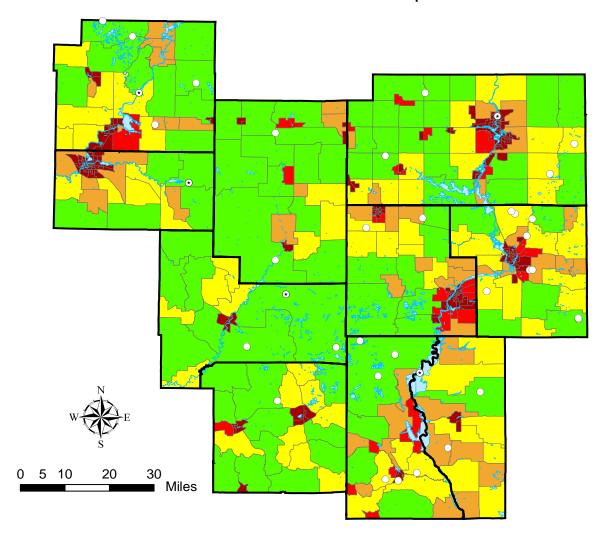


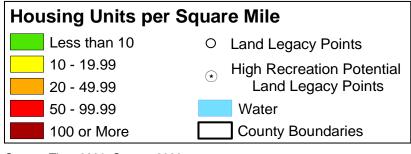


Figure 3

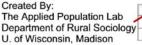
Housing Density, 2000

Calculated at Block Group Level





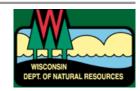
Source: Tiger 2000, Census 2000













SEASONAL HOUSING AND TOURISM

Area residents constitute much of the demand for outdoor recreation, but a certain amount of demand also comes from non-residents, like seasonal home-owners and tourists. Table 2 shows the importance of seasonal housing and tourism in the Western Sands Region. Seasonal housing is relatively unimportant in this Region, with only 5% of all housing units being for seasonal or recreational use. Still, in Adams and Juneau Counties, a substantial amount of seasonal housing exists and seasonal residents probably increase demand for outdoor recreation.

Measuring the number of tourists who visit the Western Sands Region is more difficult because good data is not readily available. Table 2 shows the percent of all workers age 16 and over who are employed in arts, entertainment, recreation, accommodation, and/or food services industries. We provide this employment measure with the idea that the more tourists who are visiting an area, the more people will be employed in tourism-related work. Tourism-related employment is particularly important in Adams, Juneau, and Jackson Counties.

Table 2
Seasonal Housing and Tourism in the Western Sands Region, 2000

	Population	Housing Units	% Seasonal	% Employed in Tourism
Adams County	19,920	14,123	39.9%	13.5%
Chippewa County	55,195	22,821	3.0%	6.0%
Clark County	33,557	13,531	6.2%	4.8%
Eau Claire County	93,142	37,474	1.0%	8.7%
Jackson County	19,100	8,029	6.5%	10.8%
Juneau County	24,316	12,370	16.5%	12.1%
Marathon County	125,834	50,360	1.1%	5.9%
Monroe County	40,899	16,672	2.7%	7.4%
Portage County	67,182	26,589	2.1%	8.4%
Wood County	75,555	31,691	0.8%	6.8%
Western Sands Region	554,700	233,660	5.1%	7.5%

Source: Census 2000, Summary File 1

Figures 4 and 5 show the distribution of seasonal housing and tourism at the Census Block Group level. In parts of Adams and Juneau Counties the majority of all housing units are for seasonal use and at least 20% of all workers are employed in tourism-related industries.

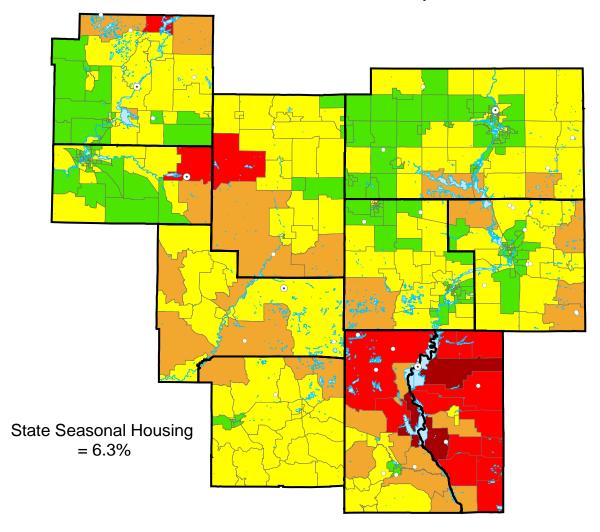


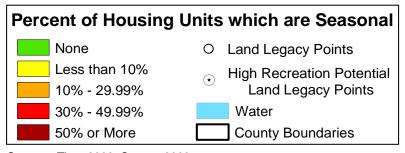


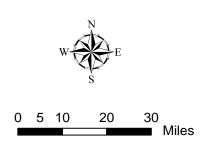
Figure 4

Seasonal Housing

Calculated at Block Group Level







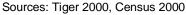






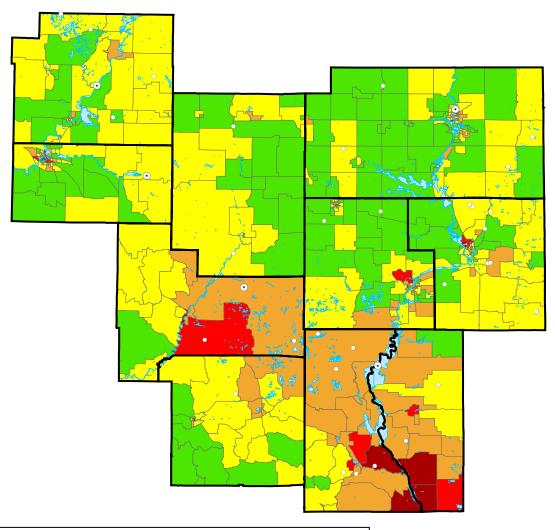


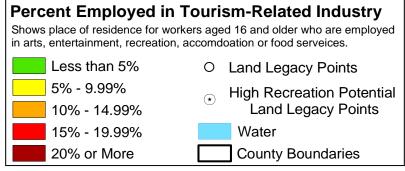


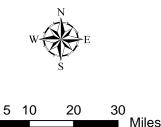
Figure 5

Tourism Industry Employment

Calculated at Block Group Level



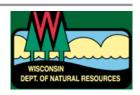




Sources: TIGER 2000, Census 2000









DEMOGRAPHIC CHARACTERISTICS

Social and economic characteristics of the population also influence participation in outdoor recreation. For instance, older people tend to participate in different recreational activities than young people; income may influence ability to participate in particular outdoor activities, like golfing; and education may have something to do with whether or not someone engages in nature study. These types of social and economic characteristics of the population vary across space. Near urban centers, people tend to make more money; near universities, people tend to be younger and more highly educated.

Table 3 provides a summary of social and economic characteristics by county. Figures 6-10 show how these characteristics vary across space.

Table 3
Demographic Characteristics in the Western Sands Region

	Total Population	Median Age	Female	College Educated	Hispanic	American Indian	Asian	Black	Median HH Income	Median Housing Value
	•	Ü			•					ÿ
Adams County	19,920	44.5	49.3%	10%	1.4%	0.6%	0.3%	0.3%	\$33,408	\$83,600
Chippewa County	55,195	37.6	50.2%	15%	0.5%	0.3%	0.9%	0.2%	\$39,596	\$88,100
Clark County	33,557	35.9	49.9%	10%	1.2%	0.5%	0.3%	0.1%	\$34,577	\$64,700
Eau Claire County	93,142	32.4	51.6%	27%	0.9%	0.5%	2.5%	0.5%	\$39,219	\$96,300
Jackson County	19,100	37.6	46.6%	11%	1.9%	6.2%	0.2%	2.3%	\$37,015	\$76,800
Juneau County	24,316	39.4	50.0%	10%	1.4%	1.3%	0.4%	0.3%	\$35,335	\$71,200
Marathon County	125,834	36.3	50.1%	18%	0.8%	0.3%	4.5%	0.3%	\$45,165	\$95,800
Monroe County	40,899	36.8	49.6%	13%	1.8%	0.9%	0.5%	0.5%	\$37,170	\$77,500
Portage County	67,182	33.0	50.2%	23%	1.4%	0.4%	2.2%	0.3%	\$43,487	\$98,300
Wood County	75,555	38.0	51.0%	17%	0.9%	0.7%	1.6%	0.3%	\$41,595	\$81,400
Western Sands Region	554,700	36.0	50.2%	18%	1.1%	0.7%	2.1%	0.4%	\$40,553	\$87,660

Source: Census 2000

Note: Regional "medians" represent the weighted average of constituent county medians;

Percent college educated calculated for persons age 25 and older; Housing value calculated for owner occupied housing units.

In comparison with other Regions, the Western Sands has an average age population. Median age for both the state of Wisconsin as a whole and for the Western Sands Region is 36 years. The population in Adams County is especially old, with a median age of almost 45 years. Median age in Eau Claire and Portage Counties is particularly young, at only 32 and 33 years respectively. These counties have young median ages, in part because the University of Wisconsin satellite campuses located there (UW- Eau Claire and UW- Stevens Point) attract young people.

Sex and race are two more important demographic characteristics that might impact participation in outdoor recreation. In terms of sex ratios, the Western Sands has moderately more females than males. Racially, the Northwoods is predominately (almost 95%) non-Hispanic and White. Asians are the largest minority group in the Region, making up about 2% of the population







Incomes, housing values and college education rates are relatively low in the Western Sands Region. Median income is highest in Marathon and Portage Counties, and lowest in Adams and Clark Counties. Clark County has the lowest median housing value in the Western Sands, while Marathon and Portage Counties have high housing values, relative to the rest of the Region. College education rates are particularly low in Adams, Clark, Juneau, and Jackson Counties; and higher than the state average in Eau Claire and Portage Counties.



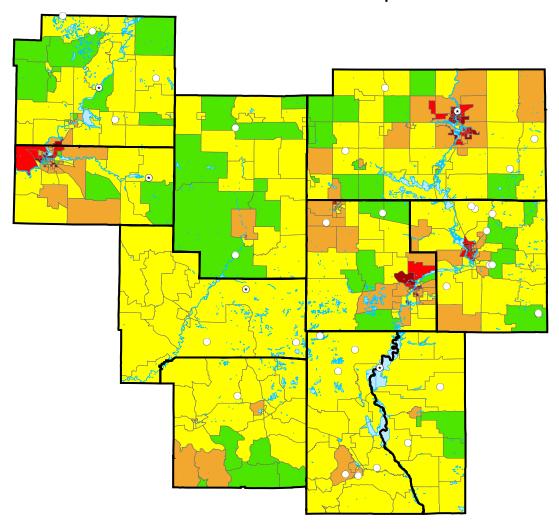


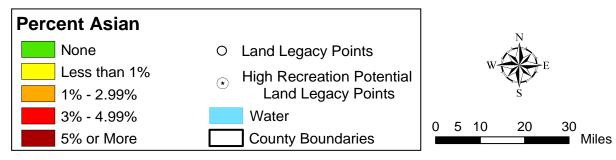


Figure 6

Asian Population

Calculated at Block Group Level





Sources: TIGER 2000, Census 2000

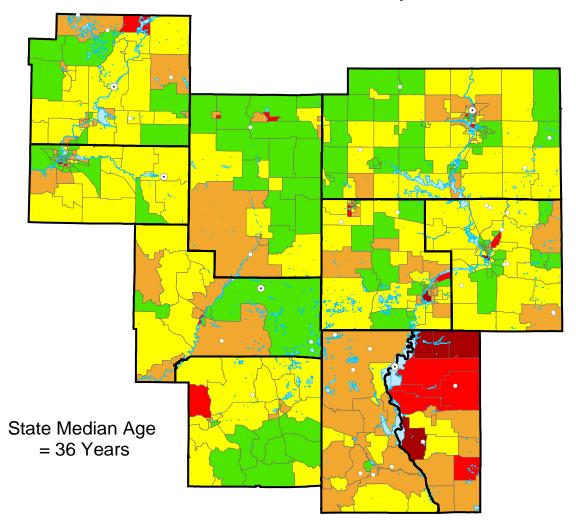


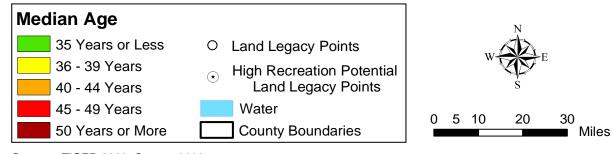


Figure 7

Median Age

Calculated at Block Group Level





Sources: TIGER 2000, Census 2000

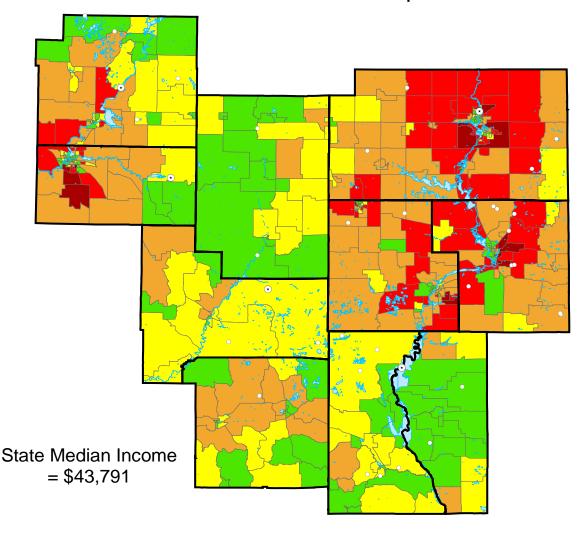


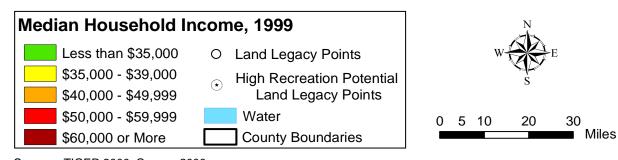


Figure 8

Median Income

Calculated at Block Group Level





Sources: TIGER 2000, Census 2000



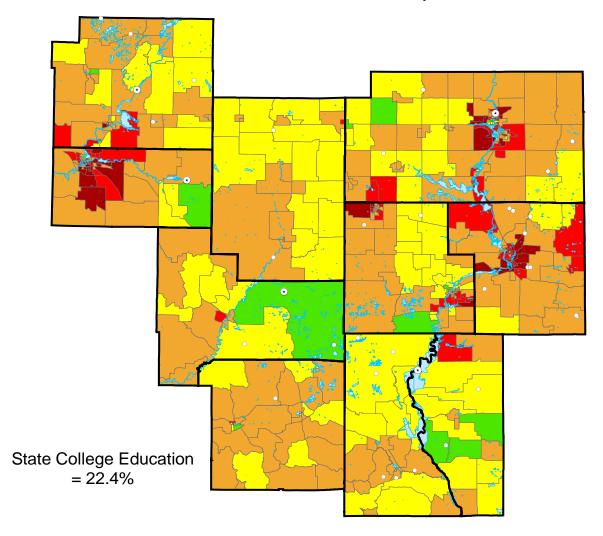




Figure 9

College Education

Calculated at Block Group Level



Percent of Population aged 25 or Older with a 4-Year College Degree



Sources: TIGER 2000, Census 2000



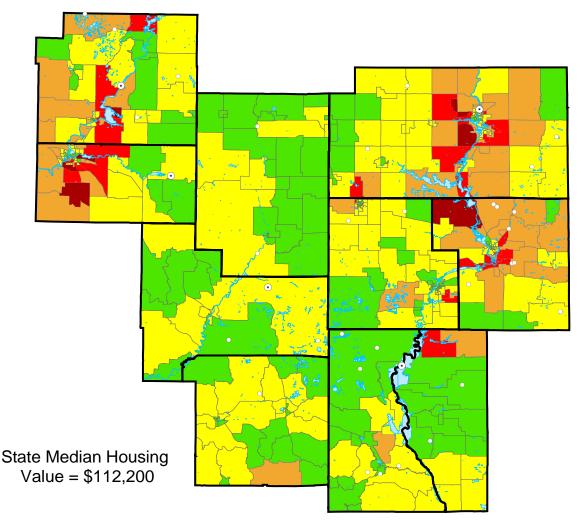


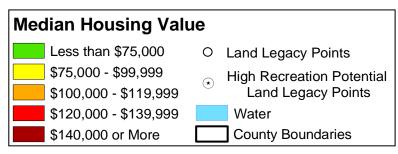


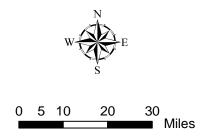
Figure 10

Median Housing Value

Calculated at Block Group Level

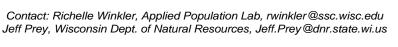






Sources: TIGER 2000, Census 2000





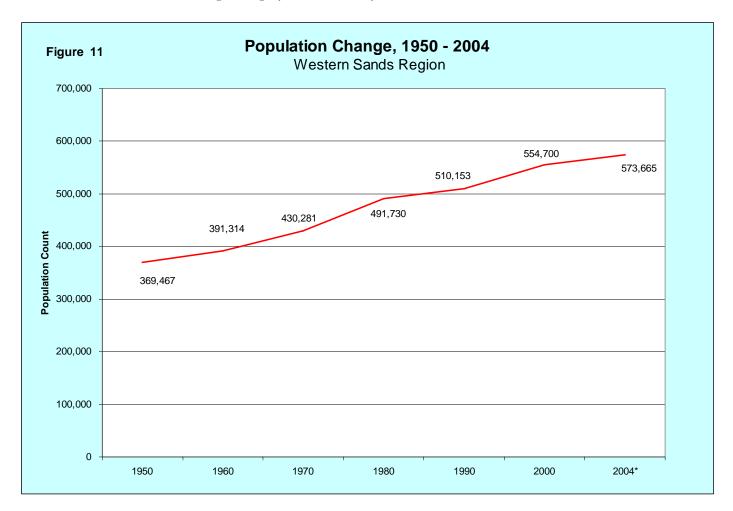




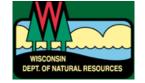
Looking at historical changes in population and housing may help to explain past and future trends in recreational participation. In this section, we examine demographic change in the Western Sands Region. We consider the growth, urbanization, and shifting age structure of the Western Sands population. In addition, we detail: where housing development has occurred, shifts in the prevalence of seasonal housing, and the impact that natural amenities (like lakes and forests) have had on population and housing growth.

POPULATION CHANGE

The Western Sands Region has experienced relatively slow and steady population growth over the last several decades, growing at an average annual rate of just under 1% each year. Figure 11 shows Regional population counts from 1950-2004. The Western Sands Region experienced relatively fast growth in the 1970s and the 1990s. Between 1990 and 2000, the Western Sands gained 44,547 people, an increase of almost 9%. The rate of increase was similar 2000-2004, growing by 3.4% in four years.









Population growth does not occur evenly across space, and while some parts of the Western Sands Region have continually experienced population growth, other areas have experienced decline. Table 4 shows population change over time by county. Adams, Marathon, Eau Claire, and Portage Counties have experienced relatively rapid growth rates over the past several decades. Since 1990, Juneau, Jackson, Monroe, and in particular Adams Counties have experienced the fastest growth rates in the Region.

Table 4a

Population Counts over Time in the Western Sands Region

			Por	oulation Co	unt		
	1950	1960	1970	1980	1990	2000	2004*
Adams County	7,906	7,566	9,234	13,457	15,682	19,920	20,707
Chippewa County	42,839	45,096	47,717	52,127	52,360	55,195	59,466
Clark County	32,459	31,527	30,361	32,910	31,647	33,557	34,373
Eau Claire County	54,187	58,300	67,219	78,805	85,183	93,142	96,214
Jackson County	16,073	15,151	15,325	16,831	16,588	19,100	19,677
Juneau County	18,930	17,490	18,455	21,037	21,650	24,316	25,470
Marathon County	80,337	88,874	97,457	111,270	115,400	125,834	129,962
Monroe County	31,378	31,241	31,610	35,074	36,633	40,899	42,626
Portage County	34,858	36,964	47,541	57,420	61,405	67,182	68,935
Wood County	50,500	59,105	65,362	72,799	73,605	75,555	76,235
Western Sands Region	369,467	391,314	430,281	491,730	510,153	554,700	573,665

^{*} Estimate from Wisconsin Dept. of Administration Sources: Census 1950-2000, Wisconsin Dept. of Administration, 2004

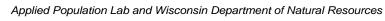
Table 4b
Population Change over Time in the Western Sands Region

	Population Change					Percent Change				Average Annual Percent Increase		
	1950-1970	1970-1990	1990-2000	2000-2004	1950-1970	1970-1990	1990-2000	2000-2004	1950-1970	1970-1990	1990-2000	2000-2004
Adams County	1,328	6,448	4,238	787	16.8%	69.8%	27.0%	4.0%	0.8%	3.5%	2.7%	1.0%
Chippewa County	4,878	4,643	2,835	4,271	11.4%	9.7%	5.4%	7.7%	0.6%	0.5%	0.5%	1.9%
Clark County	-2,098	1,286	1,910	816	-6.5%	4.2%	6.0%	2.4%	-0.3%	0.2%	0.6%	0.6%
Eau Claire County	13,032	17,964	7,959	3,072	24.1%	26.7%	9.3%	3.3%	1.2%	1.3%	0.9%	0.8%
Jackson County	-748	1,263	2,512	577	-4.7%	8.2%	15.1%	3.0%	-0.2%	0.4%	1.5%	0.8%
Juneau County	-475	3,195	2,666	1,154	-2.5%	17.3%	12.3%	4.7%	-0.1%	0.9%	1.2%	1.2%
Marathon County	17,120	17,943	10,434	4,128	21.3%	18.4%	9.0%	3.3%	1.1%	0.9%	0.9%	0.8%
Monroe County	232	5,023	4,266	1,727	0.7%	15.9%	11.6%	4.2%	0.0%	0.8%	1.2%	1.1%
Portage County	12,683	13,864	5,777	1,753	36.4%	29.2%	9.4%	2.6%	1.8%	1.5%	0.9%	0.7%
Wood County	14,862	8,243	1,950	680	29.4%	12.6%	2.6%	0.9%	1.5%	0.6%	0.3%	0.2%
Western Sands Region	60,814	79,872	44,547	18,965	16.5%	18.6%	8.7%	3.4%	0.8%	0.9%	0.9%	0.9%

Sources: Census 1950-2000, Wisconsin DOA 2004

Figure 12 shows the average annual percent increase in population that municipalities experienced over four time periods. Data are fitted to 2003 municipal boundaries.





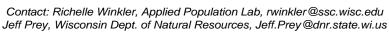
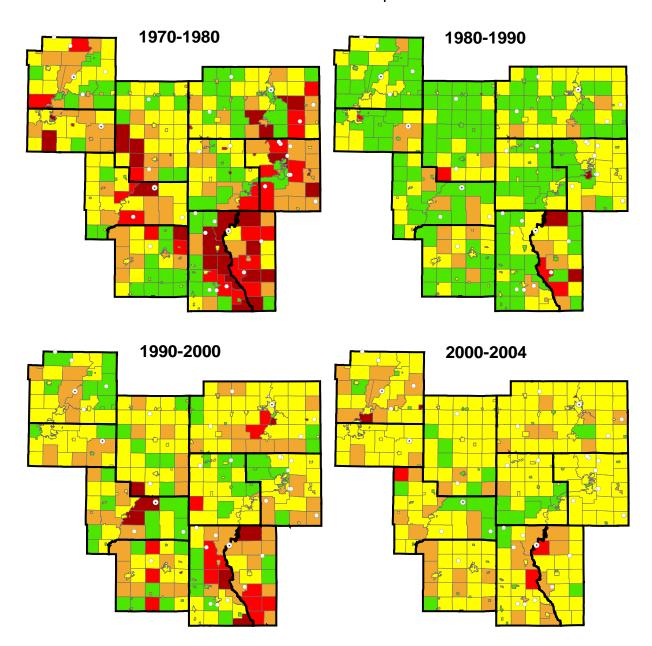




Figure 12

Population Change 1970-2004

Calculated at the Municipal Level

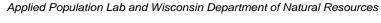


Average Annual Percent Change: Western Sands Region





Wisconsin DOA, 2004 Population Estimates Tiger 2003







AGE STRUCTURE

Demographers refer to the proportion of different aged people in the population as the population's age structure. Table 5 shows how median age has changed from 1950-2000 in the Western Sands Region. In general, the population has gotten older over the last 50 years, with the median age increasing by almost 7 years for the Region as a whole. Most of this increase occurred between 1980 and 2000, as the Baby Boom generation began to reach older ages.

Table 5
Median Age in the Western Sands Region, 1950-2000

			Mediar	n Age		
	1950	1960	1970	1980	1990	2000
Adams County	33.6	36.7	34.7	35.7	40.2	44.5
Chippewa County	28.0	27.7	26.4	29.0	33.4	37.6
Clark County	30.2	30.3	30.4	30.4	33.9	35.9
Eau Claire County	30.1	29.9	25.1	27.0	30.3	32.4
Jackson County	31.2	32.3	31.4	32.3	35.5	37.6
Juneau County	30.5	32.3	30.9	32.7	35.5	39.4
Marathon County	28.5	27.9	26.9	28.6	32.7	36.3
Monroe County	30.0	31.2	30.6	31.2	33.7	36.8
Portage County	28.7	27.4	23.2	25.4	29.3	33.0
Wood County	28.2	26.6	26.1	28.9	33.3	38.0
Western Sands Region	29.3	28.9	27.1	28.9	32.6	36.1

Source: Census 1950-2000

Note: Regional medians are derived from the weighted median of the county median ages.

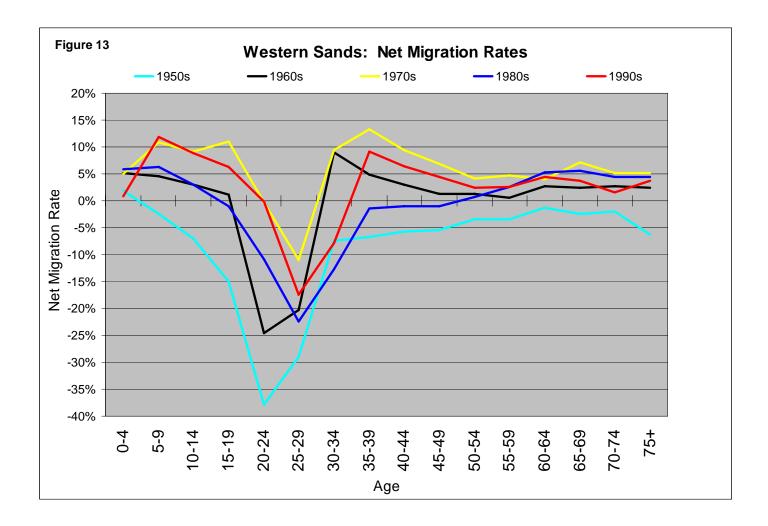
The age structure of the population in the Western Sands Region is affected, in part, by migration patterns. Migration processes affect both population counts and the age structure of the population. The balance of inand out-migration for a local area is known as "net migration." Net in-migration means that migration is contributing to (depending on natural increase in the specific area) population growth, while net out-migration would contribute to population decline. Migration especially impacts the age structure of a local population when people of different age groups experience opposite migration trends. For instance, young people tend to move out of more rural areas of the state; and older people tend to retire in natural amenity-rich rural areas. This means that many rural areas in Wisconsin are experiencing an aging population due, in part to migration; and many urban areas and university towns remain relatively young. Such age patterns will impact demand for different types of outdoor recreation.





NET MIGRATION BY AGE

Figure 13 summarizes age-specific net migration patterns for the Western Sands Region from 1950-2000. For example, in the 1950's the Western Sands experienced a net out-migration (below "0%" line) at almost every age group, especially of young adults. The 1950's net migration line tells us that the population aged 20-24 in 1960 was about 38% less than the population aged 10-14 in 1950. Since the 1970's the age group that out-migrated most has been the 25-29 year olds. This is because University of Wisconsin satellite campuses in Eau Claire and Stevens Point attract young people aged 18-22 (approximately), then these same people tend to out-migrate when they are older and have finished school. Between 1990 and 2000, the Western Sands experienced a net loss of 25-34 year olds, but saw a net increase in population at other age groups, especially of adults aged 35 to 50 and children aged 5-15. Such migration patterns will influence the number of young adults and families in the population.









URBANIZATION

Over time the population of the U.S. and of Wisconsin has become increasingly urban. In 1900, about 38% of Wisconsin residents lived in urban areas. By 2000, this proportion had increased to 68%.

The urban population has increased more quickly than the rural population in the U.S. due to both natural increase and migration. In the past, rural residents tended to have more children than urban residents, but over the last several decades, this trend has switched and urban areas have higher birth rates than rural ones. In 2003, Wisconsin metropolitan counties had 13.3 births for every 1,000 residents, while non-metropolitan counties had only 11.3 (calculated from Wisconsin Dept. of Health and Family Services data). In addition, people have tended to move out of rural areas and off farms and into urban areas over the past several decades.

Table 6 shows the percent of the population living in urban areas 1950-2000. The urban population in the Western Sands Region has increased from 39% in 1950 to 52% in 2000. Substantial urbanization occurred in most all Western Sands Counties over this time period, including: Chippewa County, Eau Claire County, Jackson County, Marathon County, Monroe County, Portage County, and Wood County.

Table 6
Urbanization in the Western Sands Region, 1950-2000

		Percent Living in Urban Areas							
	1950	1960	1970	1980	1990	2000			
Adams County	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Chippewa County	33.4%	33.9%	34.5%	37.1%	38.1%	47.0%			
Clark County	8.2%	8.7%	9.1%	8.4%	8.5%	7.3%			
Eau Claire County	65.3%	63.9%	69.2%	71.5%	74.5%	77.1%			
Jackson County	17.6%	21.1%	21.4%	20.4%	21.0%	29.3%			
Juneau County	16.8%	20.2%	18.8%	15.6%	15.9%	14.9%			
Marathon County	41.2%	46.8%	49.6%	50.5%	56.3%	55.1%			
Monroe County	34.0%	36.5%	37.7%	40.3%	41.9%	41.6%			
Portage County	47.5%	48.3%	49.4%	49.3%	50.8%	61.8%			
Wood County	51.3%	53.7%	52.2%	53.0%	53.9%	63.3%			
Western Sands Region	39.1%	42.1%	44.2%	45.2%	47.9%	51.5%			

Source: Census 1950-2000

Note: Some of the differences shown here, may be the result of changes in the way "urban" is defined by the U.S. Census Bureau.







MINORITY GROUPS

Wisconsin, in general, has a predominately White/Non-Hispanic population (87% in 2000). Though the number of minority residents has been increasing over the last few decades, minority groups still constitute a small proportion of the population for most Regions.

In the Western Sands Region, 95% of the population identified as Non-Hispanic and White on the 2000 Census. Asians made up the largest minority group in this Region, representing just over 2% of the total population. Hispanics made up just over 1% of the total population.

Table 7 shows the Asian and Hispanic populations 1960-2000. The number of Asians in the Western Sands Region increased from only 84 residents in 1960 to 11,911 residents in 2000. The number of Hispanic residents in the Region almost doubled between 1990 and 2000.

Table 7
Changing Race and Ethnicity, 1960-2000

			Percent Change			
	1960	1970	1980	1990	2000	1990-2000
Adams County	1	N/A	N/A	56	65	16.1%
Chippewa County	8	N/A	N/A	276	500	81.2%
Clark County	3	N/A	N/A	38	104	173.7%
Eau Claire County	18	N/A	N/A	2,124	2,375	11.8%
Jackson County	4	N/A	N/A	30	39	30.0%
Juneau County	6	N/A	N/A	78	110	41.0%
Marathon County	9	N/A	N/A	2,499	5,741	129.7%
Monroe County	11	N/A	N/A	143	210	46.9%
Portage County	20	N/A	N/A	786	1,540	95.9%
Wood County	4	N/A	N/A	722	1,227	69.9%
Western Sands Region	84	N/A	N/A	6,752	11,911	76.4%





Table 7 Continued

			Percent Change			
	1960	1970	1980	1990	2000	1990-2000
Adams County	N/A	46	105	308	268	-13.0%
Chippewa County	N/A	56	143	174	289	66.1%
Clark County	N/A	301	103	116	404	248.3%
Eau Claire County	N/A	221	261	437	879	101.1%
ackson County	N/A	104	43	145	357	146.2%
uneau County	N/A	22	105	152	347	128.3%
Marathon County	N/A	119	281	470	979	108.3%
Monroe County	N/A	0	125	234	740	216.2%
Portage County	N/A	422	447	572	967	69.1%
Wood County	N/A	518	271	386	709	83.7%
Western Sands Region	N/A	1,809	1,884	2,994	5,939	98.4%

Source: Census 1950-2000

Note: Methods of data collection and reporting on race and ethnicity in the Census have changed over the years.

Consequently, data for some years are not available or have been estimated, and some of the changes seen above may be artificial.

Definitions were relatively stable between 1990 and 2000.

Note: Use of terminology and "labels" when talking about racial ethnic populations can be a sensitive issue. The authors of this report understand that there are some political, cultural and social preferences and implications in using particular terminology. We have chosen to use language that reflects Census-designated racial and ethnic categories in this report.







HOUSING DEVELOPMENT

Just as population in the Western Sands Region has increased over time, so too has housing development. Figure 14 and Table 8 show the trajectory of housing growth for the Region and by county between 1950 and 2004. The number of housing units increased from 106,801 units in 1950 to 249,055 in 2004, for an overall increase of 133%. The fastest rate of growth occurred in the 1970's, when housing units increased by 35% in one decade.

Adams County has consistently experienced the most rapid rates of housing development in the Region, while Marathon and Eau Claire Counties have added the largest numbers of new housing units over time. Chippewa and Juneau Counties experienced particularly high rates of housing development between 2000 and 2004.

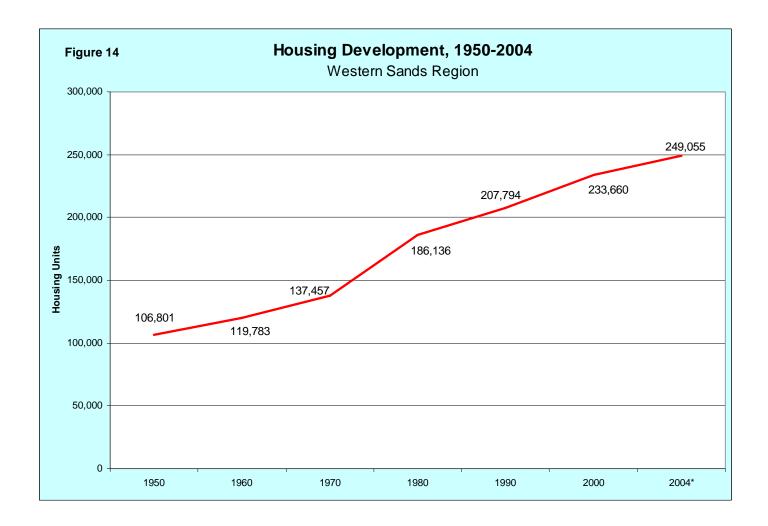








Table 8a

Housing Development over Time in the Western Sands Region

			Numbe	r of Housin	g Units		
	1950	1960	1970	1980	1990	2000	2004*
Adams County	2,864	3,560	5,242	10,084	12,418	14,123	15,309
Chippewa County	12,257	13,544	14,999	19,203	21,024	22,821	24,698
Clark County	9,556	9,678	9,913	12,384	12,904	13,531	14,152
Eau Claire County	16,148	18,268	21,209	28,973	32,741	37,474	40,032
Jackson County	5,063	5,254	5,649	6,975	7,627	8,029	8,577
Juneau County	5,744	6,245	6,954	9,937	11,422	12,370	13,367
Marathon County	22,415	26,003	29,771	39,752	43,774	50,360	53,922
Monroe County	8,755	9,261	10,168	12,741	14,135	16,672	17,890
Portage County	9,797	11,032	13,808	19,901	22,910	26,589	28,310
Wood County	14,202	16,938	19,744	26,186	28,839	31,691	32,798
Western Sands Region	106,801	119,783	137,457	186,136	207,794	233,660	249,055

^{*} Estimate from Wisconsin Dept. of Administration Sources: Census 1950-2000, Wisconsin Dept. of Administration, 2004

Table 8b
Housing Development over Time in the Western Sands Region

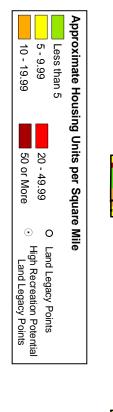
70 1970-1990 1990-2000 20 6.8% 1.4%	
6.8% 1.4%	2.10/
6.8% 1.4%	0.10/
	2.1%
2.0% 0.9%	2.1%
1.5% 0.5%	1.1%
2.7% 1.4%	1.7%
1.8% 0.5%	1.7%
3.2% 0.8%	2.0%
2.4% 1.5%	1.8%
2.0% 1.8%	1.8%
3.3% 1.6%	1.6%
2.3% 1.0%	0.9%
2.6% 1.2%	1.6%
	3.3% 1.6% 2.3% 1.0%

Figure 15 shows housing density between 1950 and 2000 at the Census Block Group level. The maps show the approximate number of housing units per square mile in each decade. The landscape has gradually filled up with increasing numbers of homes, especially around the Cities of Eau Claire, Wausau, and Stevens Point and in Adams and Juneau Counties.



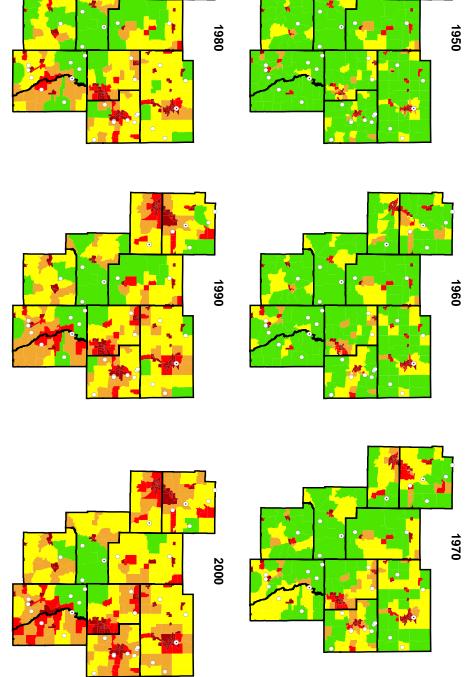


Figure 15



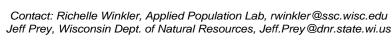
Housing Density Change over Time

Calculated by Block Group





Sources: TIGER 2000, Census 2000

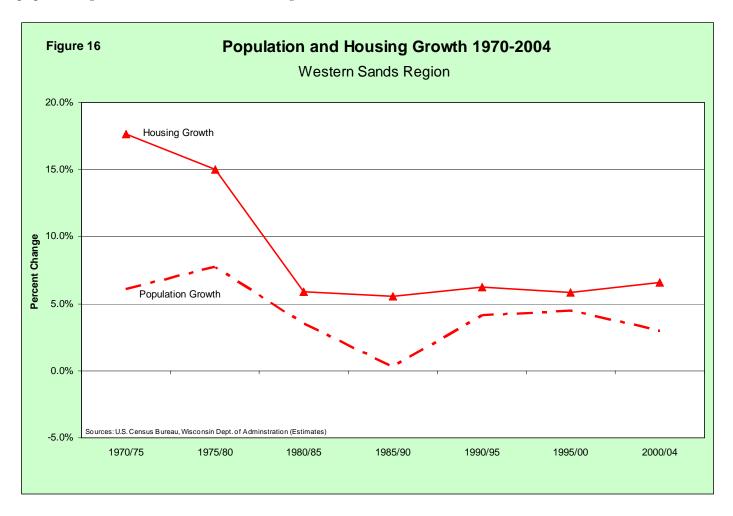




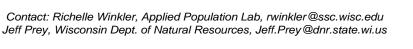
Assuming that more people need more houses, we would expect housing growth to occur in relation to population growth. In reality, housing development depends on factors other than population growth, such as: seasonal housing, interest rates, decisions of policy makers and residential developers, and the number of people per household. For this reason, we sometimes see housing growth that outpaces population growth, and vice versa.

Figure 16 shows how housing development has occurred with relation to population growth over the last few decades in the Western Sands Region. The chart shows the percent change in each time period, with 0% meaning that the number of housing units and/or population in the Region did not change at all, negative percentages depict a decline, and positive percentages show percent of increase.

In the 1970's housing growth occurred at a particularly rapid rate. In 1975 the number of housing units in the Region was about 18% higher than the number of housing units in 1970, while the number of people in 1975 was about 6% higher than the number of people in 1970. Housing development has consistently outpaced population growth in the Western Sands Region.











SEASONAL HOUSING

Over that last 50 years, seasonal housing has increasingly become a factor when thinking about outdoor recreation in the Western Sands Region, especially in Adams and Juneau Counties. Table 9 shows the counts and the percent of all housing units that were for seasonal use 1950-2000.

The number of seasonal homes in the Region increased between 1950 and 1990, from 2,641 homes to 13,918 (an increase of 427%). Between 1990 and 2000, the number of seasonal homes dropped, due to conversion into full-time residencies. During the 1990's, many people across Wisconsin chose to retire and live full-time in homes that were previously only for seasonal use. Despite this recent drop, seasonal housing remains an important factor to consider for outdoor recreation in Adams and Juneau Counties.

Table 9
Seasonal Housing in the Western Sands Region, 1950-2000

	Number of Seasonal Housing Units						Percent Seasonal		
	1950	1960	1970	1980	1990	2000	1960	1980	2000
Adams County	308	946	2,093	4,721	5,949	5,637	26.6%	46.8%	39.9%
Chippewa County	769	943	1,001	1,240	1,138	694	7.0%	6.5%	3.0%
Clark County	209	436	752	685	1,008	833	4.5%	5.5%	6.2%
Eau Claire County	259	302	553	400	363	375	1.7%	1.4%	1.0%
Jackson County	191	468	732	586	893	524	8.9%	8.4%	6.5%
Juneau County	119	498	915	1,855	2,436	2,043	8.0%	18.7%	16.5%
Marathon County	268	418	818	555	725	554	1.6%	1.4%	1.1%
Monroe County	132	413	633	328	321	450	4.5%	2.6%	2.7%
Portage County	276	446	741	693	685	557	4.0%	3.5%	2.1%
Wood County	111	204	512	252	400	244	1.2%	1.0%	0.8%
Western Sands Region	2,641	5,074	8,749	11,315	13,918	11,911	4%	6.1%	5.1%
							•		

Source: Census 1950-2000

Note: Data collection and reporting on seasonal housing have changed over the years. Consequently, data for some years have been estimated.

Note: Because of changing Census definitions and compilation methods over time, the data shown here are not perfectly comparable between decades, and they do not represent the exact truth. Rather, these data are estimates of the actual proportions of seasonal housing units, and they offer a general understanding of how seasonal housing has fluctuated over the time period.







NATURAL AMENITIES, RECREATION AND POPULATION CHANGE

Researchers (i.e. David McGranahan, Calvin Beale, and Ken Johnson) have found evidence that natural amenities (like climate, topography, forests, lakes, and rivers) and recreational resources are associated with population growth in some rural areas. The idea is that many people are attracted to natural amenities and want to live in or near places that offer natural beauty and recreational opportunities. According to this line of thought, we might expect areas rich in natural amenities to experience disproportionately high population and housing growth. This is important to consider because population and housing growth in these amenity-rich areas will impact the supply and demand for outdoor recreation, as well as the integrity of the natural environment.

We can get an idea of what the capacity for such amenity-based growth might be the Western Sands Region by looking at land cover. Table 10 shows land cover types in the Western Sands Region, as they existed in 1992. The Region mimics the state average for every type of land cover, with no particular type standing out as more or less dominant. At the county level, Jackson and Adams Counties are heavily forested. Juneau and Adams Counties have many inland lakes and rivers, and Wood and Eau Claire Counties are particularly urban.

Table 10

Land Cover in the Central Sands Region

	Urban	Agricultural	Grassland	Forest	Water	Wetland	Barren	Shrubland
Adams County	0.3%	19.3%	16.3%	44.6%	6.2%	11.0%	0.9%	1.4%
Chippewa County	0.9%	35.6%	10.8%	34.1%	3.7%	11.6%	1.2%	2.1%
Clark County	0.3%	37.6%	11.1%	34.4%	0.5%	12.7%	3.0%	0.4%
Eau Claire County	2.8%	27.2%	15.2%	40.6%	1.5%	10.3%	0.7%	1.8%
Jackson County	0.2%	16.8%	11.6%	52.1%	1.7%	16.5%	1.1%	0.0%
Juneau County	0.7%	23.5%	9.5%	38.8%	5.0%	20.5%	0.8%	1.2%
Marathon County	1.6%	37.0%	12.1%	34.5%	2.0%	11.2%	1.4%	0.2%
Monroe County	0.8%	31.4%	13.4%	41.6%	0.9%	9.3%	2.6%	0.0%
Portage County	1.6%	31.8%	20.2%	25.1%	2.0%	17.5%	1.3%	0.5%
Wood County	2.3%	27.6%	13.0%	29.0%	2.0%	24.3%	0.8%	1.0%
Central Sands Region	1.1%	29.9%	12.9%	37.2%	2.4%	14.2%	1.5%	0.8%
Wisconsin State	1.6%	30.8%	10.7%	37.5%	3.4%	14.1%	1.1%	0.9%

Source: Wisconsin DNR Wiscland, 1998







In their research, Beale and Johnson have identified non-metropolitan counties that have a great deal of tourism, recreation and entertainment, and seasonal housing. They call these counties "Nonmetro Recreation Counties," and they find that across the U.S., Recreation Counties have experienced especially high net migration rates, and higher population growth rates than either metropolitan counties or other non-metropolitan counties (Johnson and Beale, 2002).

In the Western Sands, Adams and Juneau Counties are classified as Nonmetro Recreation Counties. These counties have consistently grown at a faster rate than other counties in the Western Sands. They also are the counties with the most water (6.2% and 5% respectively) and with high proportions of forested land (45% and 39% respectively). Table 11 compares population and housing change over time in Recreation Counties to other counties in the Western Sands.

Table 11
Natural Amenities, Recreation, and Population Change: Western Sands Region

	Land Cover		Pop	oulation Char	nge	Housing Change		
	% Forest	% Water	1970-1990	1990-2000	2000-2004	1970-1990	1990-2000	2000-2004
Recreation Counties								
Adams County	44.6%	6.2%	69.8%	27.0%	4.0%	136.9%	13.7%	8.4%
Juneau County	38.8%	5.0%	17.3%	12.3%	4.7%	64.3%	8.3%	8.1%
Other Counties								
Chippewa County	34.1%	3.7%	9.7%	5.4%	7.7%	40.2%	8.5%	8.2%
Clark County	34.4%	0.5%	4.2%	6.0%	2.4%	30.2%	4.9%	4.6%
Eau Claire County	40.6%	1.5%	26.7%	9.3%	3.3%	54.4%	14.5%	6.8%
Jackson County	52.1%	1.7%	8.2%	15.1%	3.0%	35.0%	5.3%	6.8%
Marathon County	34.5%	2.0%	18.4%	9.0%	3.3%	47.0%	15.0%	7.1%
Monroe County	41.6%	0.9%	15.9%	11.6%	4.2%	39.0%	17.9%	7.3%
Portage County	25.1%	2.0%	29.2%	9.4%	2.6%	65.9%	16.1%	6.5%
Wood County	29.0%	2.0%	12.6%	2.6%	0.9%	46.1%	9.9%	3.5%

Sources: Census 1950-2000; Wisconsin Dept. of Administration, 2004; Wisconsin DNR WiscLand, 1998

It is important to note that several other factors (in addition to natural amenities and recreational opportunity) impact population and housing growth. For instance, distance from major cities and transportation routes also plays a large role in determining population and housing growth rates. These factors likely account for the observed high growth, particularly in certain time periods, of Chippewa, Eau Claire, and Portage Counties.

Because parts of the Western Sands are isolated from cities and transportation, natural amenity-based population growth may be concentrated in some areas of the Region and limited in others. In this context, we might expect population growth to occur in areas of the Western Sands Region with a combination of many lakes and forests and with access to cities and/or transportation routes.







The Wisconsin DOA provides population projections at the municipality and county levels. At the county level, they provide these projections by age, allowing us to estimate county median ages for coming years. According to these projections, the population of the Western Sands Region will continue to increase in size and in median age over the next several years.

POPULATION PROJECTIONS

By 2010 the Region's population is projected to grow to 595,455 residents, an increase of almost 4% over the 2004 population (see Table 12). By 2020 the population of the Western Sands is projected to reach 630,246. Juneau County is projected to have the highest rate of increase in the Western Sands Region. Eau Claire, Monroe, and Portage Counties are also projected to have relatively high growth rates in the coming years.

Table 12
Population Projections for the Western Sands Region

	Estimate	Projection		Projected	Increase	Average Annual % Increase	
	2004	2010	2020	2004-2010	2010-2020	2004-2010	2010-2020
Adams County	20,707	21,528	22,137	821	609	0.66%	0.28%
Chippewa County	59,466	60,217	64,292	751	4,075	0.21%	0.68%
Clark County	34,373	35,258	37,811	885	2,553	0.43%	0.72%
Eau Claire County	96,214	101,580	108,674	5,366	7,094	0.93%	0.70%
Jackson County	19,677	20,293	21,339	616	1,046	0.52%	0.52%
Juneau County	25,470	27,677	29,449	2,207	1,772	1.44%	0.64%
Marathon County	129,962	134,504	143,308	4,542	8,804	0.58%	0.65%
Monroe County	42,626	44,684	47,994	2,058	3,310	0.80%	0.74%
Portage County	68,935	72,259	76,170	3,324	3,911	0.80%	0.54%
Wood County	76,235	77,455	79,072	1,220	1,617	0.27%	0.21%
Western Sands Region	573,665	595,455	630,246	21,790	34,791	0.63%	0.58%

Source: Wisconsin Dept. of Administration, 2004

Figure 17 shows the percent increase in population projected to occur at the municipality level 2000-2010 and 2010-2020. In general, growth rates are projected to be highest along the banks of the prominent rivers in the Region (the Chippewa River, the Wisconsin River, and the Black River) and throughout much of Monroe County and in southwest Portage County. In particular, high growth rates are projected in the Towns of Eagle Point, Anson, and Dewhurst along the Chippewa River in Chippewa and southwest Clark Counties. Along the Wisconsin River, high growth rates are projected for several Towns in southern Marathon County and in Adams and Juneau Counties, in particular the Towns of Rome, Monroe, Armenia, Necedah, and Germantown in Adams and Juneau Counties. In Jackson County, the Towns of Komensky, Brockway, and Manchester (along the Black River) are projected to experience high growth rates in the coming years. In Portage County, the Villages of Plover, Amherst Junction, and Nelsonville and the Town of Lanark are projected to experience high growth.







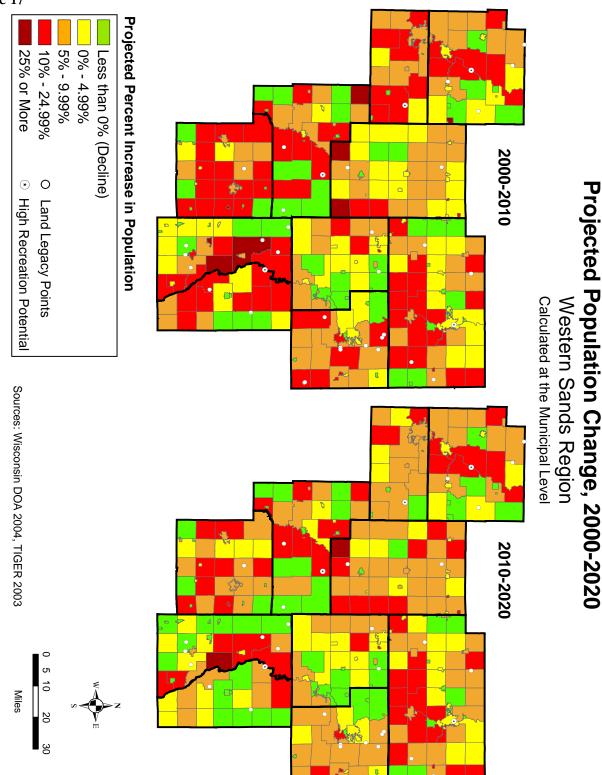
High recreational potential Land Legacy points are located in and around some areas expected to experience high growth in coming years. These include: the Upper Chippewa River between the Towns of Eagle Point and Anson, the Middle Wisconsin River between the Towns of Monroe and Armenia, and the Central Wisconsin Forests area in the Town of Komensky. Other Land Legacy points located near areas of high potential growth include: the Rib River in the Town of Halsey (Marathon County), the Necedah National Wildlife Refuge in the Town of Necedah, and the Robinson Creek Barrens in the Town of Manchester.







Figure 17





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AGE PROJECTIONS

As mentioned previously, the population in the Western Sands Region has a similar age structure to the state of Wisconsin as a whole. Projections suggest that the Region will experience an aging trend, similar to that of the state overall, in the coming years. While population in some counties is projected to age quickly (Adams, Juneau, and Wood Counties), median age in other counties is projected to remain relatively steady (Clark and Monroe Counties).

By 2010, median age is projected to reach 38 years in the Western Sands Region and for the state of Wisconsin as a whole. Median age is projected to reach 48 years in Adams County.

Table 13
Median Age in the Western Sands Region, 2000-2010

	Observed	Pro	jected	Change		
	2000	2005	2010	2000-2005	2005-2010	
Adams County	45	46	48	1	2	
Chippewa County	38	39	40	1	1	
Clark County	36	36	35	0	-1	
Eau Claire County	32	33	34	1	1	
Jackson County	38	39	39	1	0	
Juneau County	39	42	43	3	1	
Marathon County	36	38	38	2	0	
Monroe County	37	38	38	1	0	
Portage County	33	34	35	1	1	
Wood County	38	40	41	2	1	
Western Sands Region	36.0	37.4	38.0	1.4	0.6	
Wisconsin State	36.0	37.0	38.0	1.0	1.0	

Source: Wisconsin Dept. of Administration, 2004

Projected Median Age is estimated from the D.O.A. age-specific population projections, 2004







CONCLUSIONS

The Western Sands is a Region mixed with regional urban centers and rural population. The Wausau and Eau Claire metropolitan areas strongly influence the Region, yet they are relatively small urban centers in comparison to the largest cities in the state. Parts of the Western Sands Region (particularly Adams, Clark, and Juneau Counties) remain rural and relatively isolated from urban influences. The Region has experienced slow and steady population and housing growth over the last few decades and is projected to continue to experience similar growth in the coming years.

In the Western Sands, median age is similar to that of the state of Wisconsin as a whole. Income, housing values, and education rates are relatively low in the Region, especially in Clark, Adams, and Juneau Counties. Seasonal housing and tourism are relatively unimportant in the Western Sands Region, but they are prominent in Adams and Juneau Counties.

Based on the information shown in this report and from survey data that relates demographic characteristics to participation in outdoor recreational activities (NSRE 2000-2004), we can make some assumptions about the types of outdoor recreation that might be popular in the Western Sands Region. People with relatively low education and income tend to participate more in snowmobiling and paintball games and less in nature viewing and photography, walking for pleasure, mountain biking, visiting wilderness or primitive areas, golfing, visiting historic sites, sailing, canoeing, motorboating, visiting beaches, and/or bicycling.

In the younger and more urban parts of the Region, different activities may be more or less popular than in the older and more rural areas. Younger people tend to participate disproportionately in several outdoor recreation activities, including: developed camping, outdoor volleyball, running or jogging, inline skating, Frisbee golf, downhill skiing, ice skating outdoors, nature-based education, kayaking, riding personal watercraft, waterskiing, boating, bicycling, and mountain biking. In the rural areas of the Region, we might expect relatively high participation rates in activities that tend to be disproportionately popular in non-metropolitan areas. These include: ice fishing, snowmobiling, target shooting, driving for pleasure, driving off-road, driving ATV's, and gathering berries and other natural goods.

It is important to note that in areas with a large contingent of seasonal housing, participation in outdoor recreation will be impacted by characteristics of seasonal residents, as well as full-time residents. Seasonal residents tend to differ dramatically from full-time residents, particularly in terms of income and education. Seasonal residents (usually clustered around lakes) might be expected to participate most in water-based activities and boating in particular.

National Survey on Recreation and the Environment (NSRE): 2000-2004. Versions 1-18 (except 12 & 17), N=2935. Interview dates: 7/99 to 11/04. The Interagency National Survey Consortium, Coordinated by the USDA Forest Service, Recreation, Wilderness, and Demographics Trends Research Group, Athens, GA, the Human Dimensions Research Laboratory, University of Tennessee, Knoxville, TN.









